

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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**FINAL STATEMENT OF REASONS****CALIFORNIA CODE OF REGULATIONS**

**TITLE 8: Chapter 4, Subchapter 7, Article 69, Section 4543
of the General Industry Safety Orders**

Guarding of Meat Cutting Band Saw Blades**MODIFICATIONS AND RESPONSE TO COMMENTS RESULTING FROM
THE 45-DAY PUBLIC COMMENT PERIOD**

There are no modifications to the information contained in the Initial Statement of Reasons.

Summary and Response to Oral and Written Comments:**I. Written Comments**

Mr. Vic Alvarado III, Risk Control Manager, by letter revised November 14, 2006

Comments:

Five separate comments have been identified (Nos. 1-5) and responses to each have been provided.

1. Mr. Alvarado noted that subsection (a) would require all portions of the saw blade to be guarded except that portion between the bottom of the guide rolls and the table. This makes sense if it refers to the rollers below the tabletop. However, if the proposal refers to something different, it does not make sense since it is the exposed saw blade that requires guarding. He suggested modifying the proposal to state, "All portions of the saw blade shall be guarded except that portion of the material being cut."

Response to No. 1:

The Board wishes to emphasize that the proposal clearly states that the only portion of the saw blade that is required to be guarded is that section of the blade below the guide rolls and the table. This is the point of operation where the meat is introduced into the moving saw blade and cut. The point of operation cannot be guarded at the moment when meat is pushed through the blade without interfering with the cutting process. The requirement that the guard be adjusted to the level of the meat is found in the proposed subsection (b)(2). The proposed language was evaluated by Hobart and Butcher Boy bandsaw manufacturers and found to be consistent with

their blade guard designs. The proposal requires the blade to be guarded except where the meat is placed for cutting. Discussions with a Butcher Boy representative confirmed that subsection (a) is clear. Therefore, the Board does not believe modification of the proposal is necessary.

2. Mr. Alvarado believes subsection (b)(2) that states “The guard must be adjusted as close as possible to the table without interfering with the movement of the material being cut” is not specific enough. Mr. Alvarado recommended lowering the guard all the way down when the saw is not in use and down to 1/8-1/4 inch above what is being cut when the meat is being cut.

Response to No. 2:

Based on Board staff’s contacts with representatives from the meat cutting and grocery industry, reducing the guard to 1/8 inch to 1/4 inch height above the meat is not practical according to meat cutting band saw users who typically cut a variety of meat during the course of a work shift. Board staff learned that employers tailor their meat cutting methods to suit the specific type of meat being cut. The guard is adjusted to a height that the cutting work will reasonably permit. The Board believes a prescriptive guard height is infeasible. In most cases, employers adjust the equipment to a guard height that is practical for the majority of their cutting processes. The Board believes the proposal does not require modification.

3. Mr. Alvarado stated that subsection (b), which requires the guard to be self-adjusting to raise and lower automatically with the guide, is not a practical requirement because of variations in the meats that are cut. It would be better to be more specific on the height of the adjustable guard to give a better guideline to meat cutters. Mr. Alvarado suggested a modification to proposed subsection (b)(2) to read: “The guard must be adjusted as low as possible with a guideline of 1/4 inch above the highest point of the meat being cut.”

Response to No. 3:

The Board agrees with Mr. Alvarado to the extent that adjusting the guard to reduce the blade exposure when the meat is being cut reduces the chances for accidental contact and potential injury. However, since various types of meat of varying density and thickness are cut by butchers in the course of a typical workday, prescribing a 1/4 inch guideline is impractical. As stated above, Board staff’s research indicates that, to the majority of employers who perform meat cutting using band saws, a 1/4 inch guideline would be overly restrictive and would impede their ability to get the work done. Meat cutting band saws are designed to allow the user to hand adjust the blade clearance easily based on the type of meat to be cut. For this reason, proposed subsection (b) is worded to be performance based consistent with the way meat-cutting band saws are designed, thereby ensuring that the exposure of the hands and fingers to the blade is kept to an absolute minimum. The Board believes that no modification of the proposed language in subsection (b) is necessary.

4. Mr. Alvarado stated that subsection (c) requires the use of pusher plates to hold the meat against the gauge plate when cutting short ends and that butchers may resist this requirement because pusher plates are more practical in wood cutting applications where there is a more

consistent density and shape. Mr. Alavarado stated a good grip is required to “feel” the cut through the meat and bone. He suggested modifying the proposal to read: “...the use of pusher plates where possible or another method to hold the meat against the gauge that avoids close placement of the hand to the blade....”

Response to No. 4:

The Board believes that this language would include the use of other parts of the meat to push and guide the meat. The use of other parts of meat to push and guide meat into the point of operation (cutting blade) is hazardous because using other parts of meat as a pusher plate would make it difficult, if not impossible, to determine the amount of meat product that reasonably could substitute for a pusher plate (e.g., would it be a bone, a short end, a steak, a drumstick, a brisket, a turkey wing?). The Board believes there is no substitute for an engineered pusher plate that uniformly and securely guides the meat to be cut into the path of the moving blade safely. Pusher plates are provided by the manufacturer and are designed for the specific band saw.

The Board notes that in Mr. Alvarado’s oral comment to the Board in response to Board member Arioto’s question about the use of pusher plates, he stated that meat cutters will not take the time to pull out the push plate and use it. The Board believes meat cutters should use the pusher plate provided by the manufacturer for safety. The Board believes that using an animal part as a pusher plate could lead to a misfeed which could bring the operator’s hands into the point of operation and potential serious employee injury. The Board does not agree that modifying the proposal to allow the employer discretion to use another method is in the best interest of employee safety. Therefore, the Board believes no modification of the proposed language in subsection (c) is necessary.

5. Mr. Alvarado suggested a training and retraining requirement be added to the proposal.

Response to No. 5:

Current Title 8, General Industry Safety Orders, Section 3203, Injury and Illness Prevention Program (IIPP) provides standards and information for an effective, continuing safety and health hazard recognition and training program. The IIPP standard addresses employee training and refresher training requirements and applies to meat cutting operations.

Section 3203 requires the employer’s IIPP to be a written plan that includes procedures and is put into practice. The following elements are required:

- Management commitment/assignment of responsibilities;
- Safety communications system with employees;
- System for assuring employee compliance with safe work practices;
- Scheduled inspections/evaluation system;
- Accident investigation;

- Procedures for correcting unsafe/unhealthy conditions;
- Safety and health training specific to the unique hazards faced by the employee and instruction; and
- Recordkeeping and documentation.

The Board believes a vertical training/retraining standard for meat cutting is unnecessary and that no modification of the proposal is needed. The Board would like to thank Mr. Alvarado for his comments and participation in the Board's rulemaking process.

II. Oral Comments

Oral comments received at the November 16, 2006, Public Hearing in Glendale, California.

Mr. Vic Alvarado III, Insurance Industry Risk Control Manager

Comment:

Mr. Alvarado expressed support for the proposed amendments and indicated that his specific comments are contained in a separate written comment letter (see response to Mr. Alvarado's written comment letter dated November 14, 2006). He stated that the use of push guards may not always be the most practical method for safely introducing meat into the moving saw blade and that a guideline distance of 1/4 inch may be preferable to performance based language of maintaining the saw blade guard "as close as possible" to the meat being cut.

Response:

See response to written comment No. 4.

Dialogue between Ms. Liz Arioto, Occupational Safety and Health Standards Board Member (OSHSB member) and Mr. Vic Alvarado III, Insurance Industry Risk Control Manager

Ms. Arioto asked Mr. Alvarado if using a piece of meat as a pusher plate would be feasible if a pusher plate was not practical. Mr. Alvarado indicated that sometimes a push plate may not securely grasp the meat and enable the meat cutter to push it into the moving saw blade. Therefore using another piece of meat may be a way to keep the hands away from the blade and get the job done.

Ms. Arioto asked Mr. Alvarado if gloves were used. Mr. Alvarado indicated that they constitute an entanglement hazard and are not used. Board staff agrees that using gloves are problematic for two reasons: 1) they constitute an entanglement hazard which is prohibited under Title 8 standards that address entanglement and, 2) they present hygiene problems with respect to meat and meat byproducts which could contaminate the gloves and possibly transmit food borne bacteria.

Dialogue between Mr. John MacLeod, OSHSB Chairman and Mr. Vic Alvarado III, Insurance Industry Risk Control Manager

Mr. MacLeod asked why Title 8 woodworking band saw standards would be inappropriate for meat cutting. Mr. Alvarado stated that in woodworking there is no self-adjusting equipment due to the fact that unlike cuts of meat, wood is uniform in density and dimension, whereas meat cuts can vary from piece to piece. Meat cutting band saws are designed with self-adjusting or easily adjustable blade to accommodate various cuts and types of meat. Board staff recognizes that places of employment where meat is cut must comply with various hygiene and food handling standards imposed by federal and state authorities that require all food handling equipment to be washed and decontaminated after use. Unlike wood cutting band saws, meat-cutting band saws are designed to permit effective wash down and decontamination of the band saw blades, table, rollers, pusher plates and other parts that may come in contact with the product.

The Board would like to thank Mr. Alvarado for his comments and participation in the Board's rulemaking process.

Dialogue among Mr. Art Murray, OSHSB member, Mr. Michael Manieri, Principal Engineer, and Mr. Steve Rank, OSHSB member

Mr. Murray inquired about the band saw accident statistics reported in the rulemaking file and asked if those statistics reflected accidents specific to meat cutting band saws or all band saws. Mr. Manieri responded that they applied to all band saw accidents and represented a very physically and psychologically traumatic type of accident that is best addressed by a clear and effective vertical standard. Mr. Rank stated he generally concurred citing the possibility that accidents such as amputations in the meat cutting industry may be under reported.

Dialogue between Mr. John Macleod, OSHSB Chairman and Board staff

Mr. MacLeod stated that the federal government has a standard for woodcutting and that California has a vertical standard for meat cutting and was unsure how the requirement to be at least as effective as the federal standard applies in this case. He acknowledged the Board has a responsibility to maintain both a woodcutting and a meat-cutting standard. The Board acknowledges that in the absence of a California vertical standard for meat cutting, the Division would probably enforce the requirements of Title 8 woodworking machinery standards upon employers who use meat-cutting band saws. Because of the unique cutting issues meat presents versus wood products, such as equipment hygiene and cleanliness issues, enforcing a woodcutting standard upon meat cutting would be both impractical and less effective.

ADDITIONAL DOCUMENTS RELIED UPON

None.

ADDITIONAL DOCUMENTS INCORPORATED BY REFERENCE

None.

DETERMINATION OF MANDATE

These standards do not impose a mandate on local agencies or school districts as indicated in the Initial Statement of Reasons.

ALTERNATIVES CONSIDERED

The Board invited interested persons to present statements or arguments with respect to alternatives to the proposed standard. No alternative considered by the Board would be more effective in carrying out the purpose for which the action is proposed or would be as effective as and less burdensome to affected private persons than the adopted action.